

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended) A storage control sub-system of a storage control system connected to a host terminal, comprising:

~~a logical storage device having a logical storage region for storing data in a logical fashion;~~

~~a plurality of physical storage devices, comprising said logical storage device, for storing said logically stored data, in a physical fashion;~~

a plurality of logical storage devices prepared in accordance with said plurality of physical storage devices;

a virtual storage unit configured from a plurality of virtual storage regions and having a virtual storage region and being implemented in said storage control sub-system by establishing in a case where a virtual storage capacity value is established;

a memory for storing said established virtual storage capacity value;
and

a storage control section for receiving a write request from said host terminal,

wherein a pool configured from one or more first logical storage devices of said plurality of logical storage devices exists, said logical storage devices from which said pool is configured being configured from two or more logical storage regions.

~~creating an association between a virtual storage region in said virtual storage unit and a logical storage region in said logical storage device if a read request or write request is received from said host terminal which recognizes said virtual storage unit, and exchanging data between said logical storage region and said host terminal, via said virtual storage region;~~

wherein said storage control section, which is configured in such a way that when said write request is received a an association is created between an unassigned logical storage region of the plurality of logical storage regions of said pool and the virtual storage region of said virtual storage unit as specified by said write request and data is written in accordance with said write request in said assigned logical storage region, ~~reports the virtual storage capacity value stored in said memory, to said host terminal, and ensures that, after said host terminal has stored said virtual storage capacity value, said reported virtual storage capacity value is not changed while said reported virtual storage unit capacity value is being stored in~~ recognized by said host terminal.

.2. (currently amended) The storage control sub-system according to claim 1, wherein a maintenance terminal for carrying out processing for maintaining said storage control sub-system is connected to said storage control section; ~~and~~

wherein said storage control section receives a unit preparation request for preparing a new one of said virtual storage units, from said maintenance terminal or an external terminal connected to said maintenance terminal and, ~~and~~ in response to said unit preparation request, supplies a

graphical user interface comprising at the least an input box for said virtual storage capacity value, to said maintenance terminal or said external terminal, and causes the virtual storage capacity value input to said input box to be stored in said memory, as said established virtual storage capacity value.

3. (currently amended)The storage control sub-system according to claim 1, wherein said storage control sub-system ~~is capable to forms~~ a unit pair consisting of two storage units and, with one storage unit serving as ~~being taken to be a primary storage unit and the other storage unit serving as~~ being taken to be a secondary storage unit, and is capable to performs a snap shot in which ~~whereby the data in the primary storage unit is copied to the~~ secondary storage unit;

~~— a plurality of said logical storage devices are provided in said physical storage device;~~

wherein said plurality of logical storage devices include in addition to said one ~~two or more first logical storage devices configuring said pool that are not provided in said host terminal, having a logical storage region that can be associated with said virtual storage region, and one or more second logical storage devices having a logical storage region that cannot be associated with~~ said virtual storage region;

wherein said one or more second logical storage devices constitute one real storage unit connected to said host terminal; and

wherein said storage control section performs said snap shot by forming a unit pair wherein said real storage unit is taken to be serves as said primary storage unit; and said virtual storage unit serves as a storage unit, in

a case of replying to said host terminal with the virtual storage capacity value of said virtual storage unit that serves as said ~~is taken to be a secondary storage unit,~~ provided said storage control section does not reply to said host terminal with the virtual storage capacity value stored in said memory, said storage control section replies using the storage capacity value of said real storage unit serving as said primary storage unit as the virtual storage capacity value of said virtual storage unit.

4. (currently amended)The storage control sub-system according to claim 3, wherein if said storage control section receives a read request or write request for the ~~forms said unit pair comprising said virtual storage unit from and said real storage unit, in a case where said virtual storage capacity value has not been reported to said host terminal, in a case where said real storage unit which is a partner for said virtual storage unit has not been found.~~ said storage control section sends a ~~then a value equal to the storage capacity value of said real storage unit is reported _~~ to said host terminal indicating that the ~~as the storage capacity value for said virtual storage unit is~~ an uninstalled state.

5. (currently amended)The storage control sub-system according to claim 4, wherein if said storage control section sends ~~receives a~~ report to ~~said read request or write request for the virtual storage unit from said host terminal~~ indicating that the ~~, in a case where said real storage unit which is a partner for said virtual storage unit is in an uninstalled state and, if the~~ has not been found, then the storage control section sends a report to the host

~~terminal indicating that the virtual storage unit is in an uninstalled state, and if the real storage unit which is said partner is subsequently found, it reports a value equal to the storage capacity value of said real storage unit, to said host terminal, as a the storage capacity value for of said virtual storage unit a value equal to the storage capacity value of said real storage unit.~~

6. (currently amended) The storage control sub-system according to claim 1, wherein said storage control section reports the virtual storage capacity value stored in said memory, to said host terminal, if said storage control section ~~it has~~ received a prescribed command from said host terminal.

7. (currently amended) The storage control sub-system according to claim 1, wherein a maintenance terminal for carrying out processing for maintaining said storage control sub-system is connected to said storage control section, and ~~;~~

wherein said host terminal is capable to erase said stored virtual storage capacity value, by means of prescribed processing performed by said host terminal; and

if said storage control section, after reporting said virtual storage capacity value to said host terminal, receives an update request for said reported virtual storage capacity value from said maintenance terminal or an external terminal connected to said maintenance terminal, ~~then by~~ receiving a new virtual storage capacity value from said maintenance terminal or said external terminal, and storing the new virtual storage capacity value in said memory and then causing said host terminal to carry out said prescribed

processing, while said host terminal and said virtual storage unit are not connected, the new virtual storage capacity value stored in said memory is reported to said host terminal, after the old virtual storage capacity value stored in said host is caused to be erased.

8. (new) The storage control sub-system according to claim 1, wherein if a capacity change request for said virtual storage unit is received, said storage control section refuses the capacity change if the virtual storage capacity value to said host terminal has already been reported.

9. (new) The storage control sub-system according to claim 1, wherein said storage control section, if a capacity change request for said virtual storage unit is received and the virtual storage capacity value to said host terminal has already been reported, temporarily disengages connection with said host terminal and then changes the virtual storage capacity value of said virtual storage unit in accordance with said capacity change request, following which said storage control section causes said host terminal to execute a restart or rescan.